



## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-94644]

### Order Making Fiscal Year 2022 Annual Adjustments to Transaction Fee Rates

#### I. Background

Section 31 of the Securities Exchange Act of 1934 (“Exchange Act”) requires each national securities exchange and national securities association to pay transaction fees to the Commission.<sup>1</sup> Specifically, Section 31(b) requires each national securities exchange to pay to the Commission fees based on the aggregate dollar amount of sales of certain securities (“covered sales”) transacted on the exchange.<sup>2</sup> Section 31(c) requires each national securities association to pay to the Commission fees based on the aggregate dollar amount of covered sales transacted by or through any member of the association other than on an exchange.<sup>3</sup>

Section 31 of the Exchange Act requires the Commission to annually adjust the fee rates applicable under Sections 31(b) and (c) to a uniform adjusted rate.<sup>4</sup> Specifically, the Commission must adjust the fee rates to a uniform adjusted rate that is reasonably likely to produce aggregate fee collections (including assessments on security futures transactions) equal to the regular appropriation to the Commission for the applicable fiscal year.<sup>5</sup>

The Commission is required to publish notice of the new fee rates under Section 31 not later than 30 days after the date on which an Act making a regular appropriation for the

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<sup>1</sup> 15 U.S.C. 78ee.

<sup>2</sup> 15 U.S.C. 78ee(b).

<sup>3</sup> 15 U.S.C. 78ee(c).

<sup>4</sup> In some circumstances, the SEC also must make a mid-year adjustment to the fee rates applicable under Sections 31(b) and (c).

<sup>5</sup> 15 U.S.C. 78ee(j)(1) (the Commission must adjust the rates under Sections 31(b) and (c) to a “uniform adjusted rate that, when applied to the baseline estimate of the aggregate dollar amount of sales for such fiscal year, is reasonably likely to produce aggregate fee collections under [section 31] (including assessments collected under [Section 31(d)]) that are equal to the regular appropriation to the Commission by Congress for such fiscal year.”).

applicable fiscal year is enacted.<sup>6</sup> On March 15, 2022, the President signed into law the Consolidated Appropriations Act, 2022, which includes total appropriations of \$1,999,663,000 to the SEC for fiscal year 2022.

## **II. Fiscal Year 2022 Annual Adjustment to the Fee Rate**

The new fee rate is determined by (1) subtracting the sum of fees estimated to be collected prior to the effective date of the new fee rate<sup>7</sup> and estimated assessments on security futures transactions to be collected under Section 31(d) of the Exchange Act for all of fiscal year 2022<sup>8</sup> from an amount equal to the regular appropriation to the Commission for fiscal year 2022, and (2) dividing by the estimated aggregate dollar amount of covered sales for the remainder of the fiscal year following the effective date of the new fee rate.<sup>9</sup>

As noted above, the Consolidated Appropriations Act, 2022, includes total appropriations of \$1,999,663,000 to the Commission for fiscal year 2022.<sup>10</sup> The Commission estimates that it will collect \$643,763,663 in fees for the period prior to the effective date of the new fee rate and

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<sup>6</sup> 15 U.S.C. 78ee(g).

<sup>7</sup> The sum of fees to be collected prior to the effective date of the new fee rate is determined by applying the current fee rate to the dollar amount of covered sales prior to the effective date of the new fee rate. The exchanges and FINRA have provided data on the dollar amount of covered sales through February, 2022. To calculate the dollar amount of covered sales from March, 2022 to the effective date of the new fee rate, the Commission is using the same methodology it used in fiscal year 2020. This methodology is described in Appendix A of this order.

<sup>8</sup> Currently, security futures do not trade on any market, therefore the Commission has not collected any assessments for transactions in security futures. Accordingly, the forecast for the assessments for all of fiscal year 2022 for single stock futures is zero.

<sup>9</sup> To estimate the aggregate dollar amount of covered sales for the remainder of fiscal year 2022 following the effective date of the new fee rate, the Commission is using the same methodology it used previously. This methodology is described in Appendix A of this order.

<sup>10</sup> The President signed into law the “Consolidated Appropriations Act, 2022” on March 15, 2022. This legislation included an appropriation of \$1,988,550,000 to the SEC for fiscal year 2022 operations. The Act further directed that “[i]n addition to the foregoing appropriation, for move, replication, and related costs associated with a replacement lease for the Commission’s Fort Worth Regional Office facilities, not to exceed \$6,746,000, to remain available until expended; and for move, replication, and related costs associated with a replacement lease for the Commission’s San Francisco Regional Office facilities, not to exceed \$4,367,000, to remain available until expended.” The sum of these three amounts is \$1,999,663,000. Finally, the Act further directed that “for purposes of calculating the fee rate under section 31(j) ... all amounts appropriated under this heading shall be deemed to be the regular appropriation to the Commission for fiscal year 2022.”

\$0 in assessments on round turn transactions in security futures products during all of fiscal year 2022. Using the methodology described in Appendix A, the Commission estimates that the aggregate dollar amount of covered sales for the remainder of fiscal year 2022 to be \$59,331,516,269,025.

The uniform adjusted rate is computed by dividing the residual fees to be collected of \$1,355,899,337 by the estimated aggregate dollar amount of covered sales for the remainder of fiscal year 2022 of \$59,331,516,269,025; this results in a uniform adjusted rate for fiscal year 2022 of \$22.90 per million.<sup>11</sup>

### **III. Effective Date of the Uniform Adjusted Rate**

Under Section 31(j)(4)(A) of the Exchange Act, the fiscal year 2022 annual adjustments to the fee rates applicable under Sections 31(b) and (c) of the Exchange Act shall take effect on the later of October 1, 2021, or 60 days after the date on which a regular appropriation to the Commission for fiscal year 2022 is enacted.<sup>12</sup> The regular appropriation to the Commission for fiscal year 2022 was enacted on March 15, 2022, and accordingly, the new fee rates applicable under Sections 31(b) and (c) of the Exchange Act will take effect on May 14, 2022.

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<sup>11</sup> Appendix A shows the process of calculating the fiscal year 2022 annual adjustment and includes the data used by the Commission in making this adjustment.

<sup>12</sup> 15 U.S.C. 78ee(j)(4)(A).

#### **IV. Conclusion**

Accordingly, pursuant to Section 31 of the Exchange Act,

IT IS HEREBY ORDERED that the fee rates applicable under sections 31(b) and (c) of the Exchange Act shall be \$22.90 per \$1,000,000 effective on May 14, 2022.

By the Commission.

Dated: April 8, 2022.

**Jill M. Peterson,**  
*Assistant Secretary.*

## **APPENDIX A**

This appendix provides the methodology for determining the annual adjustment to the fee rates applicable under Sections 31(b) and (c) of the Exchange Act for fiscal year 2022.

Section 31 of the Exchange Act requires the fee rates to be adjusted so that it is reasonably likely that the Commission will collect aggregate fees equal to its regular appropriation for fiscal year 2022.

To make the adjustment, the Commission must project the aggregate dollar amount of covered sales of securities on the securities exchanges and certain over-the-counter (“OTC”) markets over the course of the year. The fee rate equals the ratio of the Commission’s regular appropriation for fiscal year 2022 (less the sum of fees to be collected during fiscal year 2022 prior to the effective date of the new fee rate and aggregate assessments on security futures transactions during all of fiscal year 2022) to the estimated aggregate dollar amount of covered sales for the remainder of the fiscal year following the effective date of the new fee rate.

For 2022, the Commission has estimated the aggregate dollar amount of covered sales by projecting forward the trend established in the previous decade. More specifically, the dollar amount of covered sales was forecasted for months subsequent to February 2022, the last month for which the Commission has data on the dollar volume of covered sales.<sup>13</sup>

The following sections describe this process in detail.

### **A. Baseline estimate of the aggregate dollar amount of covered sales for fiscal year 2022**

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<sup>13</sup> To determine the availability of data, the Commission compares the date of the appropriation with the date the transaction data are due from the exchanges (10 business days after the end of the month). If the business day following the date of the appropriation is equal to or subsequent to the date the data are due from the exchanges, the Commission uses these data. The appropriation was signed on March 15, 2022. The first business day after this date was March 16, 2022. Data for February were due from the exchanges on March 14, 2022. As a result, the Commission used February 2022 and earlier data to forecast volume for March 2022 and later months.

First, calculate the average daily dollar amount of covered sales (“ADS”) for each month in the sample (August 2011 – February 2022). The monthly total dollar amount of covered sales (exchange plus certain OTC markets) is presented in column C of Table A.

The model forecasts the monthly moving average of the average daily dollar amount of covered sales. Each month’s average daily dollar amount of covered sales is calculated by dividing the total covered sales for that month (column C of Table A) by the number of trading days for that month (column B of Table A). These amounts are shown in column D of Table A. The moving average will span the same number of months required to be forecast for the remainder of the fiscal year. The trailing moving average used in the forecast model is presented in column E of Table A.

To capture the recent trends in the monthly changes in the moving averages, calculate the 1-month and 2-month lags of the trailing moving average shown in column E in Table A. These amounts are shown in columns F and G, respectively, of Table A.

Next, model the monthly trailing moving average of ADS as function of a constant term and the two lagged trailing moving averages using the ordinary least squares technique.

Use the estimated model to forecast the trailing moving average of ADS of the first month after the last available monthly data. Estimate the trailing moving average of the second month using the forecasted value of the first month and the actual value of the month before that. Similarly, estimate the trailing moving average of the third month using the forecasted values of the two previous months. Continue in this fashion until the end of the fiscal year.

The estimate of the trailing moving average ADS for the last applicable month in the fiscal year is a prediction of the moving average for those months that need to be predicted. This estimate is used as the predicted value of ADS for each month in the forecast period; to obtain the forecast total covered sales for each month, multiply the predicted ADS by the number of days in each month.

The following is a more formal (mathematical) description of the procedure:

1. Begin with the monthly data for total dollar volume of covered sales (column C). The sample spans ten years, from August 2011 – February 2022.<sup>14</sup> Divide each month's total dollar volume by the number of trading days in that month (column B) to obtain the average daily dollar volume (ADS, column D).
2. For each month  $t$ , calculate the 6-month trailing moving average of ADS (shown in column E). For example, the value for January, 2012 is the average of the 6 months ending in January, 2012, or August 2011 through January 2012 inclusive.
3. Calculate the 1-month and 2-month lags of the trailing moving average. For example, the 1-month lag of the 6-month trailing moving average for February, 2012 is equal to the 6-month trailing moving average for January, 2012. The 2-month lag of the 6-month trailing moving average for March, 2012 is equal to the 6-month trailing moving average for January 2012. These are shown in columns F and G.
4. Estimate the model using ordinary least squares:

$$y_t = \alpha + \beta_1 y_{t-1} + \beta_2 y_{t-2} + u_t$$

Where  $y_t$  is the 6-month trailing moving average of the average daily sales for month  $t$ , and  $y_{t-1}$  and  $y_{t-2}$  are the 1-month and 2-month lags of  $y_t$ , and  $u_t$  representing the error term for month  $t$ . The model can be estimated using standard commercially available software. The estimated parameter values are  $\mathbf{a} = -367,840,831$ ,  $\mathbf{b}_1 = +1.635496$ ,  $\mathbf{b}_2 = -0.629751$ . The root-mean squared error (RMSE) of the regression is 10,477,301,062.

5. The predicted value of the 6-month trailing moving average of the last month to be forecast represents the final forecast of covered sales for the entire prediction period. This value is shown in column H. This represents the prediction for August of 2022. To calculate this

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<sup>14</sup> Because the model uses a two period lag in the 6-month trailing moving average of average daily covered sales, seven additional months of data are added to the table so that the model is estimated with 120 observations.

value from the model above, one needs the 1-month and 2-month lag of the 6-month trailing moving average ADS, i.e., the 6-month trailing moving average for June and July. The 6-month trailing moving average for July is obtained by using the 1-month and 2-month lags for July, that is, the 6-month trailing moving averages for June and May. To arrive at all the necessary inputs, one begins with the first month to be forecast, in this case, March 2022, and iterates predictions forward until the last month is predicted. One then multiplies the final predicted 6-month trailing moving average ADS by the number of days in each month to arrive at the forecast total dollar amount of covered sales. This is shown in column I.

6. For example, for March 2022, using the **a**, **b<sub>1</sub>**, and **b<sub>2</sub>** parameter estimates shown above, along with the 1-month and two-month lags in the 6-month trailing moving average ADS (representing the 6-month trailing moving average ADS for January and February 2022, respectively), one can estimate the forecast 6-month trailing moving average ADS for March:
 
$$-367,840,831 + (1.635496 \times 681,912,575,789) + (-0.629751 \times 641,935,586,835) = 710,637,605,562.$$
7. With the estimated 6-month trailing moving average ADS for March 2022 calculated above, one can estimate the 6-month trailing moving average ADS for April, 2022. The estimate obtained from March becomes the 1-month lag for April, and the 1-month lag used in the March forecast becomes the 2-month lag for the April forecast. Thus, the predicted 6-month trailing moving average ADS for April 2022 is calculated as:
 
$$-367,840,831 + (1.635496 \times 710,637,605,562) + (-0.629751 \times 681,912,575,789) = 732,441,711,767.$$
8. Using the forecasts for March and April, one can estimate the value for May. Repeat this procedure for subsequent months, until the estimate for August 2022 is obtained. This value



is 791,086,883,587.<sup>15</sup> This value is then used to calculate the final forecast total monthly covered sales for all 6 months from March 2022 through August 2022.

9. To obtain the estimate of total monthly covered sales for each month, multiply the number of trading days in the month, shown in column B in Table A, by the final forecast 6-month trailing moving average ADS, shown in column H of Table A. This product is shown in column I of Table A, and these figures are used to calculate the new fee rate.

#### **B. Using the forecasts from A to calculate the new fee rate**

1. Use Table A to estimate fees collected for the period September 1, 2021 through May 13, 2022. The projected aggregate dollar amount of covered sales for this period is \$126,228,169,296,551. Actual and projected fee collections at the current fee rate of \$5.10 per million are \$643,763,663.
2. Estimate the amount of assessments on security futures products collected from September 1, 2021 through August 31, 2022. The only entity reporting assessable security futures products ceased operations in September, 2020.<sup>16</sup> Consequently, the estimated amount of assessments on security futures products collected from September 2021 through August 2022 is zero.
3. Subtract the amount \$643,763,663 from the target off-setting collection amount set by Congress of \$1,999,663,000, leaving \$1,355,899,337 to be collected on dollar volume for the period May 14, 2022 through August 31, 2022.
4. Use Table A to estimate dollar volume for the period May 14, 2022 through August 31,

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<sup>15</sup> One obtains insignificantly different values using the rounded parameter estimates shown above. The predicted ADS values displayed above represents the full precision estimate.

<sup>16</sup> Currently, security futures do not trade on any market, therefore the Commission has not collected any assessments for transactions in security futures. Accordingly, the forecast for the assessments for all of fiscal year 2022 for single stock futures is zero.

2022. The estimate is \$59,331,516,269,025. Finally, compute the fee rate required to produce the additional \$1,355,899,337 in revenue. This rate is \$1,355,899,337 divided by \$59,331,516,269,025 or 0.00002285293.

5. Round the result to the seventh decimal point, yielding a rate of 0.0000229 (or \$22.90 per million).

**This table summarizes the estimates of the aggregate dollar amount of covered sales, by time period. The figures in this table can be used to determine the new fee rate.**

**Table A. Baseline estimate of the aggregate dollar amount of sales.**

**Fee rate calculation.**

a. Baseline estimate of the aggregate dollar amount of sales, 09/01/2021 to 04/30/2022 (\$Millions)	118,317,300
b. Baseline estimate of the aggregate dollar amount of sales, 05/01/2022 to 05/13/2022 (\$Millions)	7,910,869
c. Baseline estimate of the aggregate dollar amount of sales, 05/14/2022 to 05/31/2022 (\$Millions)	8,701,956
d. Baseline estimate of the aggregate dollar amount of sales, 06/01/2022 to 08/31/2022 (\$Millions)	50,629,561
e. Estimated collections in assessments on security futures products in fiscal year 2022 (\$Millions)	0.000
f. Implied fee rate $((\$1,999,663,000 - \$5.10 \times (a+b) - e) / (c+d))$	\$22.90

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	6-Month Trailing Moving Average ADS	1 Month Lag of 6-Month Trailing Moving Average ADS	2 Month Lag of 6-Month Trailing Moving Average ADS	Forecast 6-Month Trailing Moving Average ADS	Forecast Total Dollar Amount of Sales
Aug-11	23	\$8,720,566,877,109	\$379,155,081,613					
Sep-11	21	\$6,343,578,147,811	\$302,075,149,896					
Oct-11	21	\$6,163,272,963,688	\$293,489,188,747					
Nov-11	21	\$5,493,906,473,584	\$261,614,593,980					
Dec-11	21	\$5,017,867,255,600	\$238,946,059,790					
Jan-12	20	\$4,726,522,206,487	\$236,326,110,324	\$285,267,697,392				
Feb-12	20	\$5,011,862,514,132	\$250,593,125,707	\$263,840,704,741	\$285,267,697,392			
Mar-12	22	\$5,638,847,967,025	\$256,311,271,228	\$256,213,391,630	\$263,840,704,741	\$285,267,697,392		
Apr-12	20	\$5,084,239,396,560	\$254,211,969,828	\$249,667,188,476	\$256,213,391,630	\$263,840,704,741		
May-12	22	\$5,611,638,053,374	\$255,074,456,972	\$248,577,165,642	\$249,667,188,476	\$256,213,391,630		
Jun-12	21	\$5,121,896,896,362	\$243,899,852,208	\$249,402,797,711	\$248,577,165,642	\$249,667,188,476		
Jul-12	21	\$4,567,519,314,374	\$217,500,919,732	\$246,265,265,946	\$249,402,797,711	\$248,577,165,642		
Aug-12	23	\$4,621,597,884,730	\$200,939,038,467	\$237,989,584,739	\$246,265,265,946	\$249,402,797,711		
Sep-12	19	\$4,598,499,962,682	\$242,026,313,825	\$235,608,758,505	\$237,989,584,739	\$246,265,265,946		
Oct-12	21	\$5,095,175,588,310	\$242,627,408,967	\$233,677,998,362	\$235,608,758,505	\$237,989,584,739		
Nov-12	21	\$4,547,882,974,292	\$216,565,855,919	\$227,259,898,186	\$233,677,998,362	\$235,608,758,505		
Dec-12	20	\$4,744,922,754,360	\$237,246,137,718	\$226,150,945,771	\$227,259,898,186	\$233,677,998,362		
Jan-13	21	\$5,079,603,817,496	\$241,885,896,071	\$230,215,108,494	\$226,150,945,771	\$227,259,898,186		

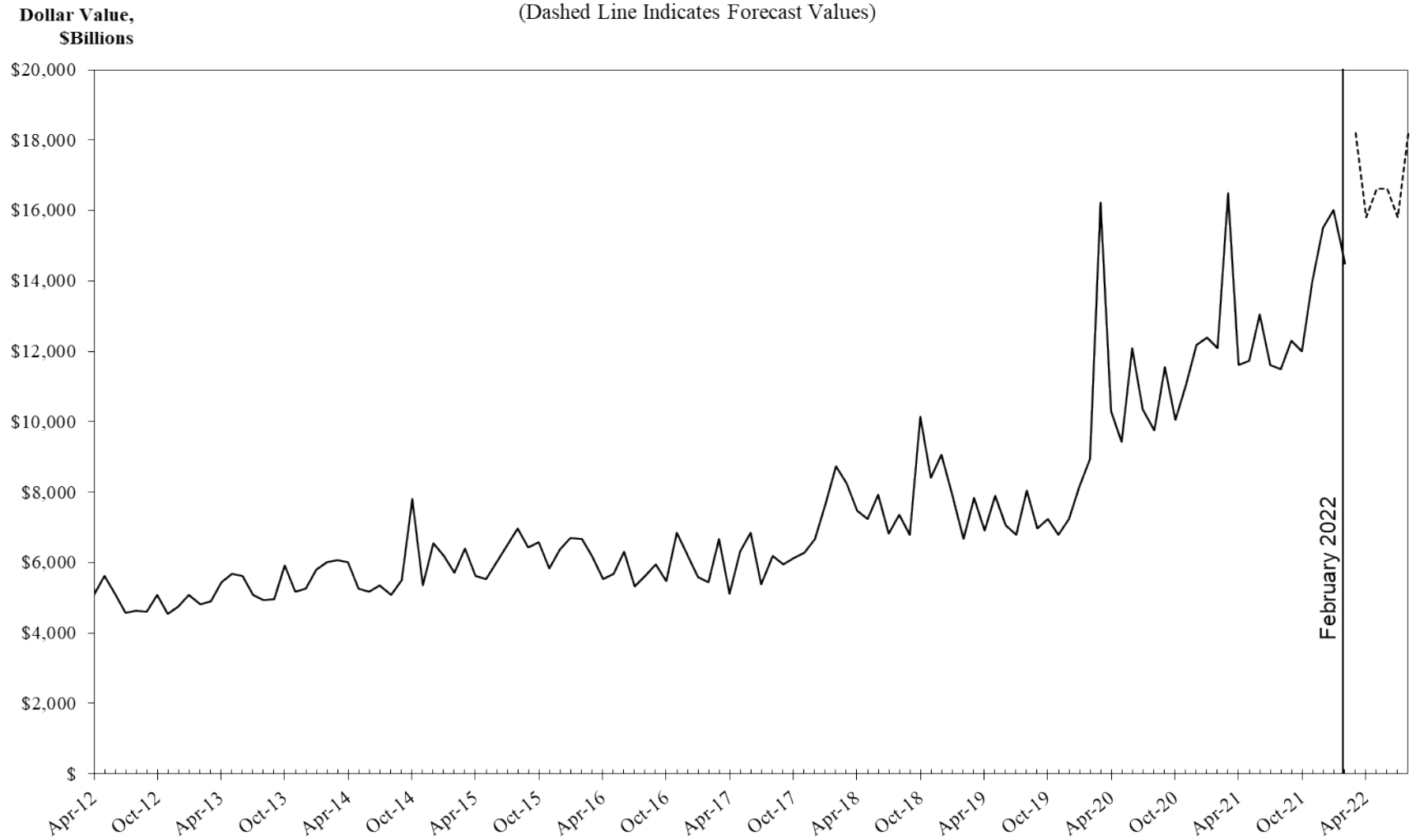
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	6-Month Trailing Moving Average ADS	1 Month Lag of 6-Month Trailing Moving Average ADS	2 Month Lag of 6-Month Trailing Moving Average ADS	Forecast 6-Month Trailing Moving Average ADS	Forecast Total Dollar Amount of Sales
Feb-13	19	\$4,800,663,527,089	\$252,666,501,426	\$238,836,352,321	\$230,215,108,494	\$226,150,945,771		
Mar-13	20	\$4,917,701,839,870	\$245,885,091,993	\$239,479,482,016	\$238,836,352,321	\$230,215,108,494		
Apr-13	22	\$5,451,358,637,079	\$247,789,028,958	\$240,339,752,014	\$239,479,482,016	\$238,836,352,321		
May-13	22	\$5,681,788,831,869	\$258,263,128,721	\$247,289,297,481	\$240,339,752,014	\$239,479,482,016		
Jun-13	20	\$5,623,545,462,226	\$281,177,273,111	\$254,611,153,380	\$247,289,297,481	\$240,339,752,014		
Jul-13	22	\$5,083,861,509,754	\$231,084,614,080	\$252,810,939,715	\$254,611,153,380	\$247,289,297,481		
Aug-13	22	\$4,925,611,193,095	\$223,891,417,868	\$248,015,092,455	\$252,810,939,715	\$254,611,153,380		
Sep-13	20	\$4,959,197,626,713	\$247,959,881,336	\$248,360,890,679	\$248,015,092,455	\$252,810,939,715		
Oct-13	23	\$5,928,804,028,970	\$257,774,088,216	\$250,025,067,222	\$248,360,890,679	\$248,015,092,455		
Nov-13	20	\$5,182,024,612,049	\$259,101,230,602	\$250,164,750,869	\$250,025,067,222	\$248,360,890,679		
Dec-13	21	\$5,265,282,994,173	\$250,727,761,627	\$245,089,832,288	\$250,164,750,869	\$250,025,067,222		
Jan-14	21	\$5,808,700,114,288	\$276,604,767,347	\$252,676,524,499	\$245,089,832,288	\$250,164,750,869		
Feb-14	19	\$6,018,926,931,054	\$316,785,627,950	\$268,158,892,846	\$252,676,524,499	\$245,089,832,288		
Mar-14	21	\$6,068,617,342,988	\$288,981,778,238	\$274,995,875,663	\$268,158,892,846	\$252,676,524,499		
Apr-14	21	\$6,013,948,953,528	\$286,378,521,597	\$279,763,281,227	\$274,995,875,663	\$268,158,892,846		
May-14	21	\$5,265,594,447,318	\$250,742,592,729	\$278,370,174,915	\$279,763,281,227	\$274,995,875,663		
Jun-14	21	\$5,159,506,989,669	\$245,690,809,032	\$277,530,682,815	\$278,370,174,915	\$279,763,281,227		
Jul-14	22	\$5,364,099,567,460	\$243,822,707,612	\$272,067,006,193	\$277,530,682,815	\$278,370,174,915		
Aug-14	21	\$5,075,332,147,677	\$241,682,483,223	\$259,549,815,405	\$272,067,006,193	\$277,530,682,815		
Sep-14	21	\$5,507,943,363,243	\$262,283,017,297	\$255,100,021,915	\$259,549,815,405	\$272,067,006,193		
Oct-14	23	\$7,796,638,035,879	\$338,984,262,430	\$263,867,645,387	\$255,100,021,915	\$259,549,815,405		
Nov-14	19	\$5,340,847,027,697	\$281,097,211,984	\$268,926,748,596	\$263,867,645,387	\$255,100,021,915		
Dec-14	22	\$6,559,110,068,128	\$298,141,366,733	\$277,668,508,213	\$268,926,748,596	\$263,867,645,387		
Jan-15	20	\$6,185,619,541,044	\$309,280,977,052	\$288,578,219,786	\$277,668,508,213	\$268,926,748,596		
Feb-15	19	\$5,723,523,235,641	\$301,238,065,034	\$298,504,150,088	\$288,578,219,786	\$277,668,508,213		
Mar-15	22	\$6,395,046,297,249	\$290,683,922,602	\$303,237,634,306	\$298,504,150,088	\$288,578,219,786		
Apr-15	21	\$5,625,548,298,004	\$267,883,252,286	\$291,387,465,949	\$303,237,634,306	\$298,504,150,088		
May-15	20	\$5,521,351,972,386	\$276,067,598,619	\$290,549,197,054	\$291,387,465,949	\$303,237,634,306		
Jun-15	22	\$6,005,521,460,806	\$272,978,248,218	\$286,355,343,969	\$290,549,197,054	\$291,387,465,949		
Jul-15	22	\$6,493,670,315,390	\$295,166,832,518	\$284,002,986,546	\$286,355,343,969	\$290,549,197,054		
Aug-15	21	\$6,963,901,249,270	\$331,614,345,203	\$289,065,699,908	\$284,002,986,546	\$286,355,343,969		
Sep-15	21	\$6,434,496,770,897	\$306,404,608,138	\$291,685,814,164	\$289,065,699,908	\$284,002,986,546		
Oct-15	22	\$6,592,594,708,082	\$299,663,395,822	\$296,982,504,753	\$291,685,814,164	\$289,065,699,908		
Nov-15	20	\$5,822,824,015,945	\$291,141,200,797	\$299,494,771,783	\$296,982,504,753	\$291,685,814,164		

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	6-Month Trailing Moving Average ADS	1 Month Lag of 6-Month Trailing Moving Average ADS	2 Month Lag of 6-Month Trailing Moving Average ADS	Forecast 6-Month Trailing Moving Average ADS	Forecast Total Dollar Amount of Sales
Dec-15	22	\$6,384,337,478,801	\$290,197,158,127	\$302,364,590,101	\$299,494,771,783	\$296,982,504,753		
Jan-16	19	\$6,696,059,796,055	\$352,424,199,792	\$311,907,484,647	\$302,364,590,101	\$299,494,771,783		
Feb-16	20	\$6,659,878,908,747	\$332,993,945,437	\$312,137,418,019	\$311,907,484,647	\$302,364,590,101		
Mar-16	22	\$6,161,943,754,542	\$280,088,352,479	\$307,751,375,409	\$312,137,418,019	\$311,907,484,647		
Apr-16	21	\$5,541,076,988,322	\$263,860,808,968	\$301,784,277,600	\$307,751,375,409	\$312,137,418,019		
May-16	21	\$5,693,520,415,112	\$271,120,019,767	\$298,447,414,095	\$301,784,277,600	\$307,751,375,409		
Jun-16	22	\$6,317,212,852,759	\$287,146,038,762	\$297,938,894,201	\$298,447,414,095	\$301,784,277,600		
Jul-16	20	\$5,331,797,261,269	\$266,589,863,063	\$283,633,171,413	\$297,938,894,201	\$298,447,414,095		
Aug-16	23	\$5,635,976,607,786	\$245,042,461,208	\$268,974,590,708	\$283,633,171,413	\$297,938,894,201		
Sep-16	21	\$5,942,072,286,976	\$282,955,823,189	\$269,452,502,493	\$268,974,590,708	\$283,633,171,413		
Oct-16	21	\$5,460,906,573,682	\$260,043,170,175	\$268,816,229,361	\$269,452,502,493	\$268,974,590,708		
Nov-16	21	\$6,845,287,809,886	\$325,966,086,185	\$277,957,240,431	\$268,816,229,361	\$269,452,502,493		
Dec-16	21	\$6,208,579,880,985	\$295,646,660,999	\$279,374,010,803	\$277,957,240,431	\$268,816,229,361		
Jan-17	20	\$5,598,200,907,603	\$279,910,045,380	\$281,594,041,190	\$279,374,010,803	\$277,957,240,431		
Feb-17	19	\$5,443,426,609,533	\$286,496,137,344	\$288,502,987,212	\$281,594,041,190	\$279,374,010,803		
Mar-17	23	\$6,661,861,914,530	\$289,646,170,197	\$289,618,045,047	\$288,502,987,212	\$281,594,041,190		
Apr-17	19	\$5,116,714,033,499	\$269,300,738,605	\$291,160,973,118	\$289,618,045,047	\$288,502,987,212		
May-17	22	\$6,305,822,460,672	\$286,628,293,667	\$284,604,674,365	\$291,160,973,118	\$289,618,045,047		
Jun-17	22	\$6,854,993,097,601	\$311,590,595,346	\$287,261,996,756	\$284,604,674,365	\$291,160,973,118		
Jul-17	20	\$5,394,333,070,522	\$269,716,653,526	\$285,563,098,114	\$287,261,996,756	\$284,604,674,365		
Aug-17	23	\$6,206,204,906,864	\$269,834,995,951	\$282,786,241,215	\$285,563,098,114	\$287,261,996,756		
Sep-17	20	\$5,939,886,169,525	\$296,994,308,476	\$284,010,930,928	\$282,786,241,215	\$285,563,098,114		
Oct-17	22	\$6,134,529,538,894	\$278,842,251,768	\$285,601,183,122	\$284,010,930,928	\$282,786,241,215		
Nov-17	21	\$6,289,748,560,897	\$299,511,836,233	\$287,748,440,217	\$285,601,183,122	\$284,010,930,928		
Dec-17	20	\$6,672,181,323,001	\$333,609,066,150	\$291,418,185,351	\$287,748,440,217	\$285,601,183,122		
Jan-18	21	\$7,672,288,677,308	\$365,347,079,872	\$307,356,589,742	\$291,418,185,351	\$287,748,440,217		
Feb-18	19	\$8,725,420,462,639	\$459,232,655,928	\$338,922,866,405	\$307,356,589,742	\$291,418,185,351		
Mar-18	21	\$8,264,755,011,030	\$393,559,762,430	\$355,017,108,730	\$338,922,866,405	\$307,356,589,742		
Apr-18	21	\$7,490,308,402,446	\$356,681,352,497	\$367,990,292,185	\$355,017,108,730	\$338,922,866,405		
May-18	22	\$7,242,077,467,361	\$329,185,339,426	\$372,935,876,051	\$367,990,292,185	\$355,017,108,730		
Jun-18	21	\$7,936,783,802,579	\$377,942,085,837	\$380,324,712,665	\$372,935,876,051	\$367,990,292,185		
Jul-18	21	\$6,807,593,326,456	\$324,171,110,784	\$373,462,051,150	\$380,324,712,665	\$372,935,876,051		
Aug-18	23	\$7,363,115,477,823	\$320,135,455,558	\$350,279,184,422	\$373,462,051,150	\$380,324,712,665		
Sep-18	19	\$6,781,988,459,996	\$356,946,761,052	\$344,177,017,526	\$350,279,184,422	\$373,462,051,150		

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	6-Month Trailing Moving Average ADS	1 Month Lag of 6-Month Trailing Moving Average ADS	2 Month Lag of 6-Month Trailing Moving Average ADS	Forecast 6-Month Trailing Moving Average ADS	Forecast Total Dollar Amount of Sales
Oct-18	23	\$10,133,514,482,168	\$440,587,586,181	\$358,161,389,806	\$344,177,017,526	\$350,279,184,422		
Nov-18	21	\$8,414,847,862,204	\$400,707,041,057	\$370,081,673,412	\$358,161,389,806	\$344,177,017,526		
Dec-18	19	\$9,075,221,733,736	\$477,643,249,144	\$386,698,533,963	\$370,081,673,412	\$358,161,389,806		
Jan-19	21	\$7,960,664,643,749	\$379,079,268,750	\$395,849,893,624	\$386,698,533,963	\$370,081,673,412		
Feb-19	19	\$6,676,391,653,247	\$351,389,034,381	\$401,058,823,428	\$395,849,893,624	\$386,698,533,963		
Mar-19	21	\$7,828,979,311,928	\$372,808,538,663	\$403,702,453,030	\$401,058,823,428	\$395,849,893,624		
Apr-19	21	\$6,907,923,076,080	\$328,948,717,909	\$385,095,974,984	\$403,702,453,030	\$401,058,823,428		
May-19	22	\$7,895,053,976,747	\$358,866,089,852	\$378,122,483,117	\$385,095,974,984	\$403,702,453,030		
Jun-19	20	\$7,070,583,442,058	\$353,529,172,103	\$357,436,803,610	\$378,122,483,117	\$385,095,974,984		
Jul-19	22	\$6,792,811,319,721	\$308,764,150,896	\$345,717,617,301	\$357,436,803,610	\$378,122,483,117		
Aug-19	22	\$8,059,527,400,976	\$366,342,154,590	\$348,209,804,002	\$345,717,617,301	\$357,436,803,610		
Sep-19	20	\$6,958,132,871,506	\$347,906,643,575	\$344,059,488,154	\$348,209,804,002	\$345,717,617,301		
Oct-19	23	\$7,235,982,824,882	\$314,607,948,908	\$341,669,359,987	\$344,059,488,154	\$348,209,804,002		
Nov-19	20	\$6,784,888,230,209	\$339,244,411,510	\$338,399,080,264	\$341,669,359,987	\$344,059,488,154		
Dec-19	21	\$7,252,856,724,647	\$345,374,129,745	\$337,039,906,538	\$338,399,080,264	\$341,669,359,987		
Jan-20	21	\$8,178,172,797,805	\$389,436,799,895	\$350,485,348,037	\$337,039,906,538	\$338,399,080,264		
Feb-20	19	\$8,951,554,790,521	\$471,134,462,659	\$367,950,732,716	\$350,485,348,037	\$337,039,906,538		
Mar-20	22	\$16,218,726,536,159	\$737,214,842,553	\$432,835,432,545	\$367,950,732,716	\$350,485,348,037		
Apr-20	21	\$10,289,596,902,933	\$489,980,804,902	\$462,064,241,877	\$432,835,432,545	\$367,950,732,716		
May-20	20	\$9,435,524,799,540	\$471,776,239,977	\$484,152,879,955	\$462,064,241,877	\$432,835,432,545		
Jun-20	22	\$12,093,857,552,130	\$549,720,797,824	\$518,210,657,968	\$484,152,879,955	\$462,064,241,877		
Jul-20	22	\$10,355,334,352,448	\$470,697,016,020	\$531,754,027,322	\$518,210,657,968	\$484,152,879,955		
Aug-20	21	\$9,763,364,099,611	\$464,922,099,981	\$530,718,633,543	\$531,754,027,322	\$518,210,657,968		
Sep-20	21	\$11,545,564,207,158	\$549,788,771,769	\$499,480,955,079	\$530,718,633,543	\$531,754,027,322		
Oct-20	22	\$10,052,383,314,951	\$456,926,514,316	\$493,971,906,648	\$499,480,955,079	\$530,718,633,543		
Nov-20	20	\$11,039,477,432,965	\$551,973,871,648	\$507,338,178,593	\$493,971,906,648	\$499,480,955,079		
Dec-20	22	\$12,172,302,216,779	\$553,286,464,399	\$507,932,456,356	\$507,338,178,593	\$493,971,906,648		
Jan-21	19	\$12,396,479,814,996	\$652,446,306,052	\$538,224,004,694	\$507,932,456,356	\$507,338,178,593		
Feb-21	19	\$12,103,659,666,497	\$637,034,719,289	\$566,909,441,246	\$538,224,004,694	\$507,932,456,356		
Mar-21	23	\$16,485,012,205,966	\$716,739,661,129	\$594,734,589,472	\$566,909,441,246	\$538,224,004,694		
Apr-21	21	\$11,602,282,119,601	\$552,489,624,743	\$610,661,774,543	\$594,734,589,472	\$566,909,441,246		
May-21	20	\$11,729,455,630,914	\$586,472,781,546	\$616,411,592,860	\$610,661,774,543	\$594,734,589,472		
Jun-21	22	\$13,038,812,281,463	\$592,673,285,521	\$622,976,063,047	\$616,411,592,860	\$610,661,774,543		
Jul-21	21	\$11,623,478,100,180	\$553,498,957,151	\$606,484,838,230	\$622,976,063,047	\$616,411,592,860		

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Month	# of Trading Days in Month	Total Dollar Amount of Sales	Average Daily Dollar Amount of Sales (ADS)	6-Month Trailing Moving Average ADS	1 Month Lag of 6-Month Trailing Moving Average ADS	2 Month Lag of 6-Month Trailing Moving Average ADS	Forecast 6-Month Trailing Moving Average ADS	Forecast Total Dollar Amount of Sales
Aug-21	22	\$11,493,350,851,643	\$522,425,038,711	\$587,383,224,800	\$606,484,838,230	\$622,976,063,047		
Sep-21	21	\$12,312,072,157,576	\$586,289,150,361	\$565,641,473,005	\$587,383,224,800	\$606,484,838,230		
Oct-21	21	\$12,011,570,888,110	\$571,979,566,100	\$568,889,796,565	\$565,641,473,005	\$587,383,224,800		
Nov-21	21	\$13,996,377,941,116	\$666,494,187,672	\$582,226,697,586	\$568,889,796,565	\$565,641,473,005		
Dec-21	22	\$15,494,373,840,971	\$704,289,720,044	\$600,829,436,673	\$582,226,697,586	\$568,889,796,565		
Jan-22	20	\$16,002,717,162,409	\$800,135,858,120	\$641,935,586,835	\$600,829,436,673	\$582,226,697,586		
Feb-22	19	\$14,483,452,476,259	\$762,286,972,435	\$681,912,575,789	\$641,935,586,835	\$600,829,436,673		
Mar-22	23				\$681,912,575,789	\$641,935,586,835	\$791,086,883,587	\$18,194,998,322,501
Apr-22	20					\$681,912,575,789	\$791,086,883,587	\$15,821,737,671,740
May-22	21						\$791,086,883,587	\$16,612,824,555,327
Jun-22	21						\$791,086,883,587	\$16,612,824,555,327
Jul-22	20						\$791,086,883,587	\$15,821,737,671,740
Aug-22	23						\$791,086,883,587	\$18,194,998,322,501

**Figure A.**  
 Aggregate Dollar Amount of Sales Subject to Exchange Act Sections 31(b) and 31(c)<sup>1</sup>  
 Methodology Developed in Consultation With OMB and CBO  
 (Dashed Line Indicates Forecast Values)



<sup>1</sup>Forecasted line is not smooth because the number of trading days varies by month.